



# Center Profile

Outreach Publication

*“The vision of Rail Transportation Program is to expand its service to the rail industry by offering an interdisciplinary program in railroad engineering and urban rail transit that will provide opportunities for our students and faculty to participate in the development and operation of rail transportation for the 21<sup>st</sup> Century.”*

## Rail Transportation Program

The Rail Transportation Program (RTP) was officially established in 2007 within the Michigan Tech Transportation Institute. The multi-disciplinary program uses three integrated activity groups to increase rail exposure and to engage students, faculty and industry partners in rail transportation—Projects and Research, Education, and Events and Extracurricular Activities.



### Program

Rail Transportation Program (RTP)

### Center Staff

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## Projects and Research

Since 2007, the RTP has received over \$1 million in funding which includes \$600,000 in awarded research from these projects:

- Synthesis of Railroad Engineering Best Practices in Deep Seasonal Frost and Permafrost Areas, University of Alaska-Fairbanks
- Project 3 of Frontier Renewable Resources Center of Energy Excellence: Improving Forest Feedstock Harvesting, Processing and Hauling Efficiencies, Frontier Renewable Resources as part of Center of Energy Excellence
- Atlantis Policy Project on Tuning Transatlantic Cooperation in Rail Higher Education (TUNRail), Department of Education
- Forestry Bio Fuel Statewide Collaboration, Department of Energy
- Improving Log Transportation with Data Based Monitoring and Analysis in Northern Wisconsin and Upper Peninsula of Michigan, National Center for Freight and Infrastructure Research and Education (CFIRE)
- Study of Greenhouse Gas Savings Associated with Congestion Reduction Using Multi-Modal Optimization of Timber Shipments in the North Central United States, University of Wisconsin-Superior (US Department of Transportation)

## Education

In addition to the four engineering classes currently offered in rail transportation/engineering, a multi-discipline Certificate in Rail Transportation is under development. Additionally, the first Summer Youth Program in Rail and Intermodal Transportation was held for high school students this past year and will continue next summer.



## University Facts (2009-2010)

|                     |       |
|---------------------|-------|
| Total Enrollment    | 7148  |
| Civil Engineering   | 546   |
| Graduate Enrollment | 1206  |
| Number of Faculty   | 464   |
| Placement Rate      | 87.5% |

Michigan Tech ranks in the top 25% of public research institutions by the National Science Foundation and has annual research expenditures exceeding \$57 million. More than 56% of Michigan Tech's student population is enrolled in science and engineering degree fields with a campus-wide graduation placement rate of 87%.

Michigan Tech houses a wide complement of transportation-related programs partnering in research, technology transfer, education, and workforce development. Under the umbrella of the Michigan Tech Transportation Institute, federally funded centers collaborate with state and internally funded centers and programs. Federally funded programs include the UTC-MiSTI, Michigan's Local Technical Assistance Program, and the Region 2 Tribal Technical Assistance Program. State funded research centers and laboratories include the Michigan Department of Transportation funded Transportation Materials Research Center and the Center for Structural Durability. Internal programs include the Center for Technology and Training, and the Rail Transportation Program.

For more information, visit the University's website.  
[www.mtu.edu](http://www.mtu.edu)

## Events and Extracurricular Activities

The Railroad Engineering and Activities Club (REAC) was the first official student chapter of the American Railway Engineering & Maintenance of Way Association (AREMA). In addition to organizing conference and industry events, its 40+ members sponsor various events in conjunction with the RTP to increase the visibility of the railroad industry on campus and among the general public. Events include:

- Railroad Night
- Rail Info Night
- Make a Difference Day
- Boy Scout Merit Badges
- Rail History Night
- History and Future of Passenger Rail in the United States

## Partnerships

Since the inception of the RTP, a high priority has been placed on university-industry partnerships. Our two official industry partners collaborate with the program on multiple levels. In February 2010, industry support enabled the opening of the CN Rail Transportation and Education Center (CN RTEC), a multi-use space housing a media center and the highly popular student center. Contributions by Union Pacific Railroad have been critical to the development of the RTP and have generated scholarships to students, as well as provided funding for student experiences.

Support by our program partners is instrumental in determining the future direction of the Rail Transportation Program and the success of the rail program students at Michigan Tech. We look forward to continued collaborations with our current supporters as well as developing new industry partnerships.



## For More Information

For additional information on the Rail Transportation Program, visit [www.rail.mtu.edu](http://www.rail.mtu.edu).

For additional information on other transportation related programs at Michigan Tech, visit this website [www.mtti.mtu.edu](http://www.mtti.mtu.edu).



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